PTO/SB/21 (09-04)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
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OTRANSMITTAL		Application Number	•	09/975,220		
FARM		Filing Date		October 11	, 2001	
SEP 2 7 2005	l	First Named Invento	or	MAHENDR	AN	
Z SEF Z		Art Unit		1723		
(to be the selection of	nce after initial filing)	Examiner Name		KIM, Sun U	i.	
Total Number of Pages in This S		Attorney Docket Nu	mber	4320-443		
	ENCLO	SURES (check all that	apply)			
Fee Transmittal Form	☐ Drawing(			After Allo	wance Communication	to TC
Fee Attached	Licensing	-related Papers		—	ommunication to Board	
Amendment / Reply	Petition			— …	ommunication to TC otice, Brief, Reply Brief)	
After Final		Convert to a all Application		Proprieta	ry Information	
Affidavits/declaration(s)		Attorney, Revocation of Correspondence Addre	ess	Status Le	tter	
Extension of Time Request	Terminal	Disclaimer			nclosure(s) entify below):	
Express Abandonment Request		for Refund ber of CD(s)		Request for C Return Recei	Certificate of Correction pt Postcard	
☐ Information Disclosure State		ndscape Table on CD				
Certified Copy of Priority Document(s)	Remarks				•	
Reply to Missing Parts/					Certificate SEP 2 9 2000  of Cerrection	
Reply to Missing Parts					SEP 2 a a	
under 37 CFR1.52 or 1					Of Co. 3 2006	۶
	SIGNATURE OF	APPLICANT, ATTOR	NEY, OF	R AGENT	Orection	
Firm	Bereskin & Par	r				
Signature	Sco	Kindszak				
Printed Name	Scott Pundsact	<b>k</b>				
Date	September 25,	2006	Reg. No.	47,330		
	CERTIFICA	TE OF TRANSMISSI	ON/MAI	LING		$\overline{}$
I hereby certify that this corres Service with sufficient postage Alexandria, VA 22313-1450 on	e as first class mail	in an envelope address				
Signature						
Typed or printed name				Date		

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/17 (01-06)

Approved for use through 07/31/2006. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

	7/2/1	All English	spond to a collection of		olete if Kno	ys a valid OMB control number	
Fees pursuant to the Consolidated		·	Application Number		75,220		
FEE TRA	NSM	ITTAL I	Filing Date		ber 11, 200	1	
	Y 2006		First Named Invent		IENDRAN e		
			Examiner Name	<del></del>	Sun U.	t di.	
Applicant claims small enti	ity status. See	37 CFR 1.27	Art Unit	1723			
TOTAL AMOUNT OF PAYMEN	NT (\$)	100.00	Attorney Docket No	<del></del>	)-443		
METHOD OF PAYMENT (check all that apply)							
Check Credit Card	d L_Money	Order Nor	e Other (pleas	e identify)			
Deposit Account Depos	sit Account Numb	er: 022095	Deposit Accou	nt Name:	Ber	eskin & Parr	
For the above-identified	deposit accour	t, the Director is he	eby authorized to: (cl	neck all tha	at apply)		
Charge fee(s) ind	icated below		Charge fe	e(s) indica	ated below, e	xcept for the filing fee	
Charge any additional fee(s) or underpayments of fee(s) under 37 CFR 1.16 and 1.17							
WARNING: Information on this for information and authorization on F	m may become <sub>l</sub>	oublic. Credit card inf	ormation should not b	e included	on this form. I	Provide credit card	
FEE CALCULATION (All the		are due unon fi	ling or may be sul	niect to s	surcharge	. )	
1. BASIC FILING, SEARCH			ing of may be sur	oject to a	a surcharge	.,	
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2. EXCESS CLAIM FEES		•	Ü	Ū	U	Small Entity	
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Multiple dependent clain		ing reissues)			360	180	
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3. APPLICATION SIZE FEE If the specification and dra		l 100 sheets of pa	per (excluding elec	tronicall	v filed seque	ence or computer	
listings under 37 CFR							
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4. OTHER FEE(S) Non-English Specification		<del></del>	_, ,		-	Fees Paid (\$)	
Other (e.g., late filing su	rcharge): <u>Cert</u>	ficate of Correction				100.00	

SUBMITTED BY			
Signature	Seas findant	Registration No. (Attorney/Agent) 47,330	Telephone (416) 364-7311
Name (Print/Type	) Scott Pundsack		Date September 25, 2006

This collection of information is required by 37 CFR 1.136. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

PTO/SB/17 (01-06)

Under the Paperwork Reduction A	ct of 1993	are required to		and Tradema	rk Office; U.S. DEF	07/31/2006. OMB 0651-0032 PARTMENT OF COMMERCE a valid OMB control number
5		6: A 4 0005 (U.S. 4040)		Com	plete if Know	'n
Fees pursuant to the Consolidated			Application Numl	ber 09/9	975,220	
FEE TRA			Filing Date	Oct	ober 11, 2001	
For I	FY 2(	006	First Named Inve	entor MA	HENDRAN et a	al.
Applicant claims small ent	ity status	See 37 CFR 1 27	Examiner Name	KIN	l, Sun U.	
	<u> </u>	000 07 01 10 1.27	Art Unit	172	3	
TOTAL AMOUNT OF PAYME	NT (\$)	100.00	Attorney Docket	No. 432	0-443	
METHOD OF PAYMENT (c	heck all	that apply)				
Check Credit Card Money Order None Other (please identify):  Deposit Account Deposit Account Number: 022095 Deposit Account Name: Bereskin & Parr						
For the above-identified	deposit a	ccount, the Director is h	•	· · · · · · ·		
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FEE CALCULATION (All t	he fees l	oelow are due upon	filing or may be s	subject to	a surcharge.)	
1. BASIC FILING, SEARCH						
1	FILING F	EES SEA	RCH FEES Small Entity		ATION FEES Small Entity	
Application Type F	ee (\$)	Fee (\$) Fee		Fee (\$)	Fee (\$)	Fees Paid (\$)
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Utility	300	150 500		200	100	
•			250			
Design	300	150 500	250	200	100	

2. EXCESS CLAIM FE	ES				Small Entity
Fee Description				Fee (\$)	<u>Fee (\$)</u>
Each claim over 20	(including Reissu	es)		50	25
Each independent cl	aim over 3 (inclu	ding Reissue	s)	200	100
Multiple dependent	claims	_		360	180
Total Claims	Extra Claims	Fee (\$)	Fee Paid (\$)	Multiple Dep	endent Claims
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HP = highest number of total	al claims paid for, if gre	eater than 20.			
Indep. Claims	Extra Claims	Fee (\$)	Fee Paid (\$)	<del></del>	
3 or HP =	x		<b>:</b>		
HP = highest number of inde	ependent claims paid f	or, if greater tha	n 3.		
APPLICATION SIZE	CCC				

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Provisional

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. APPLICATION SIZE FEE
If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$250 (\$125 for small entity) for each additional 50

sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s). Number of each additional 50 or fraction thereof Total Sheets Extra Sheets Fee Paid (\$) (round up to a whole number) x 4. OTHER FEE(S) Fees Paid (\$) Non-English Specification, \$130 fee (no small entity discount) Other (e.g., late filing surcharge): Certificate of Correction 100.00

SUBMITTED BY			
Signature	Cost (welson	Registration No. (Attorney/Agent) 47,330	Telephone (416) 364-7311
Name (Print/Typ	pe) Scott Pundsack		Date September 25, 2006

This collection of information is required by 37 CFR 1.136. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

# Bereskin & Parr

INTELLECTUAL PROPERTY LAW

Patent No

RE39,294

Reissued

September 19, 2006

Appl. No

09/975,220

Applicant Filed

Mahendran et al. October 11, 2001

Title

VERTICAL SKEIN OF HOLLOW FIBER MEMBRANES AND

Confirmation No.: 7794

METHOD OF MAINTAINING CLEAN FIBER SURFACES WHILE FILTERING A SUBSTRATE TO WITHDRAW A

**PERMEATE** 

TC./A.U.

1723

Examiner

KIM, Sun U.

Docket No.

4320-443

Customer No.

001059

Certificate of Correction Branch Honorable Commissioner for Patents P. O. Box 1450 Alexandria, Virginia 22313–1450 September 25, 2006

REQUEST FOR CERTIFICATE OF CORRECTION

09/28/2006 LWONDIM1 00000022 RE39294

UNDER 35 U.S.C. 254 and 255

01 FC:1811

100.00 OP

#### Dear Sir:

In accordance with the provisions of 35 U.S.C. 254 and 255, the Patentee herein through his Attorney respectfully requests that a Certificate of Correction be issued in the above-referenced Patent. Patentee hereby requests that:

#### In the Front Pages

In the References Cited, "U.S. PATENT DOCUMENTS" section, spanning pages 1 and 2, the following references be added:

Patent No.

Date:

Name

5,403,479

4/1995

Smith et al.

5,480,553

1/1996

Yamamori et al.

5,607,593

3/1997

Cote et al.

RE37,549

02/2002

Mahendran et al.

Manulife Corporate Park, 6733 Mississauga Road, Suite 600, Mississauga, Ontario L5N 6J5

Tel: 905.812.3600 Fax: 905.814.0031 www.bereskinparr.com

OCT - 2 2005

Amdt. Dated September 22, 2006

5,209,852	05/1993	Sunsoka et al.
4,756,875	07/1988	Tajima et al.
4,775,471	10/1988	Nagai et al.
4,075,100	02/1978	Furuta et al.
4,605,500	08/1986	Takemura et al.
4,707,268	11/1987	Shah et al.
4,876,006	10/1989	Ohkubo et al.
4,886,601	12/1989	lwatsuka et al.
4,915,833	04/1990	lwatsuka et al.
5,151,191	09/1992	Sunaoka et al.
5,192,456	03/1993	Ishida et al.
5,584,997	12/1997	Yagihashi et al.
5,643,455	07/1997	Kopp et al.
5,647,988	07/1997	Kawanishi et al.
5,451,317	09/1995	Ishida et al.
5,366,625	11/1994	Pedersen et al.
5,639,373	06/1997	Mahendran et al.
6,156,200	12/2000	Zha et al.

In the References Cited, "FOREIGN PATENT DOCUMENTS" section, spanning pages 1 and 2, the following references be added:

Country Code	Document No.	Date
JP	61-107905	5/1986
JP	62-201610	9/1987
JP	63-143905	6/1988
SU	1,692,626	11/1991
EP	0 598 909 A1	06/1994
JP	61-192309	08/1986
JP	06-343837	12/1994
JP	04-247295	09/1992

Amdt. Dated September 22, 2006

WO	WO 98/28066	07/1998
EP	0734758	10/1996
WO	WO 96/07470	03/1996
WO	WO 93/23152	11/1993
JP	07-000770	01/1995
JP	02-164423	06/1990
JP	62-114609	05/1987
JP	62-004408	01/1987
JP	04-180821	06/1992
JP	04-197487	07/1992
JP	02-293093	12/1990
JP	07-136470	05/1995
JP	08-215548	08/1996
JP	S63-38884	10/1988
JP	07-024272	01/1995
JP	03-131324	06/1991
JP	07-185268	07/1995
JP	05-285349	11/1993
JP	62-250908	10/1987

In the References Cited, "OTHER PUBLICATIONS" section, spanning pages 1 and 2, the following references be added:

English translated abstract for Japanese Patent No. 63-143,905 issued June, 1998.

English language abstract of JP 61-192309

English language translation of JP 63-143,905

English language abstract of JP 06-343837

English language abstract of JP 04-247295

English language abstract of JP 07-000770

English language abstract of JP 02-164423

English language abstract of JP 62-114609

Amdt. Dated September 22, 2006

English language abstract of JP 62-004408

English language abstract of JP 04-180821

English language abstract of JP 04-197487

English language abstract of JP 02-293093

English language abstract of JP 07-136470

English language abstract of JP 08-215548

English language abstract of JP 61-107905

English language abstract of JP 07-024272

English language abstract of JP 03-131324

English language abstract of JP 62-201610

English language abstract of JP 07-185268

English language abstract of JP 05-285349

English language abstract of JP 62-250908

English language abstract of SU 1692626

"Direct Solid-Liquid Separation Using Hollow Fiber Membrane in an Activated Sludge Aeration Tank" by K. Yamamoto; M. Hiasa; T. Mahmood and T. Matsuo; Wat. Sci. Tech. Vol. 21, Brighton, pp. 43-54 (1989).

"Organic Stabilization And Nitrogen Removal In Membrane Separation Bioreactor For Domestic Wastewater Treatment" by C. Chiemchaisri, Y.K. Wong, T. Urase and K. Yamamoto, presented at Membrane Technology in Wastewater Management, Cape Town, March 2-5, 1992

"Optimal fiber spacing in externally pressurized hollow fiber module for solid liquid separation", by KIAT, YAMOTO et al., Water Science Technology Vol. 26, pp 1245-1254, (1992)

"Household membrane bioreactor in domestic wastewater treatment", by CHIEMCHAISRI et al. Water Science Technology Vol. 27, No. 1, pp 171-178, (1993)

"Organic wastewater treatment by activated sludge process using integrated type membrane separation", by FUTAMURA et al. Proceedings IDA and WRPC World Conference on Desalination and Water Treatment, November 1993, Vol. 1, pp 223-230

"Integrated membrane-filtration activated-sludge wastewater treatment system", by ONISHI and FUTAMURAProceedings 1994 MIE International Forum and Symposium on Global Environment and Friendly energy Technology, pp 365-368

"Integrated membrane filtration activated sludge wastewater treatment system", International Symposium on Fibre Science and Technology (ISF'94), Yokohama, October, 1994

'CT - 2 2006

Amdt. Dated September 22, 2006

ZeeWeed 145 Product Data Sheet

#### In the Claims

In claim 23, line 16, delete the first and second instance of "a," and substitute --said-- for each instance.

In claim 23, line 20, delete "permeate-collection" and substitute --permeate collection--.

In claim 23, line 35, delete "between".

In claim 25, column 33, line 64, delete the first and second instance of "a," and substitute --said-- for each instance.

In claim 25, column 34, line 3, delete "permeate-collection" and substitute --. permeate collection--.

In claim 25, column 34, line 18, delete "between".

In claim 26, line 44, delete the first and second instance of "a," and substitute -- said-- for each instance.

In claim 26, line 48, delete "permeate-collection" and substitute --permeate collection--.

In claim 26, line 63, delete "between".

In claim 29, column 35, line 32, delete the first and second instance of "a," and substitute --said-- for each instance.

In claim 29, column 35, line 36, delete "permeate-collection" and substitute -- permeate collection--.

In claim 29, column 36, line 7, delete "between".

三人名马纳 塩

Patent No. RE39,294

Appl. No. 09/975,220

Amdt. Dated September 22, 2006

#### Remarks

The errors in the References Cited section were an omission on the part of the Patent Office. Some of the omitted references were submitted by the Applicants in an Information Disclosure Statement filed on November 22, 2002, considered by the Examiner on January 14, 2004 and returned to the Applicants with an Office Action mailed March 20, 2003. Copies of this Office Action and initialed Information Disclosure Statement are attached to this request. The Applicants note that these documents are also not contained in the Image File Wrapper for this application and request that they be added to the Image File Wrapper. The remainder of the omitted references were listed on a Notice of References Cited prepared by the Examiner on form PTO-892, copy attached, which was enclosed with an Office Action mailed July 23, 2002.

The errors in the claims were caused by the Applicants. The initial portion of claims 23, 25, 26 and 29 were copied from claim 1 and should be the same as claim 1. However, the errors to be corrected were made.

The Patentee submits that the errors in the claims relate to minor typographical mistakes which occurred in good faith. The Applicants further submit that correction of the errors will not introduce new matter or require re-examination.

A Certificate of Correction incorporating the above changes is enclosed herewith in duplicate.

The government fee of \$100.00 is included in our firm's cheque. If additional fees are required, the Commissioner is herby authorized to charge the fees to our Deposit Account No. 02-2095.

- 2 2003°

Amdt. Dated September 22, 2006

The Applicants respectfully request that a timely Certificate of Correction be issued in this case.

Respectfully submitted,

Mahendran et al.

Scott Pundsack

Reg. No. 47,330

Tel: (416) 957-1698



### United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.usplo.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/975,220	10/11/2001	Mailvaganam Mahendran	ZEN-9501RE-A	7794
1059 75	590 03/20/2003		,	
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TORONTO, OF CANADA	N M5H 3Y2		ART UNIT	PAPER NUMBER
		< UB)	1723	
	•		DATE MAILED: 03/20/2003	<b>i</b>
		$p_0$		
	( )			

Please find below and/or attached an Office communication concerning this application or proceeding.

APR 0 1 2003

BERESKIN & PARR

AS-14

Office Action Summary

Application No. 09/975,220

Applicant(s)

Examiner

John Kim

Art Unit 1723

Mahendran et al.



•••	on the cover sheet with the correspondence address
Period for Reply	
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET THE MAILING DATE OF THIS COMMUNICATION.	
<ul> <li>Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In mailing date of this communication.</li> </ul>	no event, however, may a reply be timely filed after SIX (6) MONTHS from the
If the period for reply specified above is less than thirty (30) days, a reply within the period for reply is specified above, the maximum statutory period will apply	the statutory minimum of thirty (30) days will be considered timely.
- Failure to reply within the set or extended period for reply will, by statute, cause	the application to become ABANDONED (35 U.S.C. § 133).
<ul> <li>Any reply received by the Office later than three months after the mailing date of earned patent term adjustment. See 37 CFR 1.704(b).</li> </ul>	this communication, even if timely filed, may reduce any 2.0. Ent., 1, 20, 20, 20, 20, 20, 20, 20, 20, 20, 20
Status	to million .
1) X Responsive to communication(s) filed on 11/21/02	. 1/29/03, 2/6/03
2a) ☑ This action is <b>FINAL</b> . 2b) ☐ This ac	tion is non-final.
3) Since this application is in condition for allowance closed in accordance with the practice under Ex pa	except for formal matters, prosecution as to the merits is arte Quayle, 1935 C.D. 11; 453 O.G. 213.
Disposition of Claims	
4) 💢 Claim(s) <u>1-30</u>	is/are pending in the application.
4a) Of the above, claim(s)	is/are withdrawn from consideration.
5)  Claim(s)	is/are allowed.
6) 💢 Claim(s) <u>1-30</u>	is/are rejected.
7)  Claim(s)	is/are objected to.
8)	are subject to restriction and/or election requirement.
Application Papers	
9) $\square$ The specification is objected to by the Examiner.	
10)□ The drawing(s) filed on is/arc	e a) 🗆 accepted or b) 🗆 objected to by the Examiner.
	drawing(s) be held in abeyance. See 37 CFR 1.85(a).
	is: a) $\square$ approved b) $\square$ disapproved by the Examiner.
If approved, corrected drawings are required in reply	
12) The oath or declaration is objected to by the Exam	niner.
Priority under 35 U.S.C. §§ 119 and 120	
13) Acknowledgement is made of a claim for foreign p	priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:	
1. $\square$ Certified copies of the priority documents ha	ve been received.
2. $\square$ Certified copies of the priority documents ha	ve been received in Application No
3. Copies of the certified copies of the priority of application from the International Bure	documents have been received in this National Stage eau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the	
14) Acknowledgement is made of a claim for domestic	priority under 35 U.S.C. § 119(e).
a) $\square$ The translation of the foreign language provision	al application has been received.
15) Acknowledgement is made of a claim for domestic	priority under 35 U.S.C. §§ 120 and/or 121.
Attachment(s)	,
1) Notice of References Cited (PTO-892)	4) Interview Summary (PTO-413) Paper No(s) OCT - 2 2
21 Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) Notice of Informal Patent Application (PTO-152)
3) N Information Disclosure Statement(s) (PTO-1449) Paper No(s)6	6) Other:

Art Unit: 1723

1. The specification is objected to because of the following:

If applicant files more than one application for the reissue of a single patent, each such application must contain or be amended to contain in the first sentence of the specification a notice stating that more than one reissue application has been filed and identifying each of the reissue applications by relationship, application number and filing date. See 37 CFR 1.177(a). Suggested notice is as follows:

"Application 09/975,220 filed October 11, 2001, and copending application 09/333,669 filed June 15, 1999, are each reissues of U.S. Patent No. 5,639,373 (Application No. 08/514,119 filed August 11, 1995)."

Appropriate correction is required.

- 2. The terminal disclaimer filed on 11/21/02 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of U.S. Patent No. 5,783,083 and RE37,549 and any patent granted on pending Application No. 09/621,234 and Application No. 09/849,573 and Application No. 10/178,838 has been reviewed and is accepted. The terminal disclaimer has been recorded.
- 3. In accordance with 37 CFR 1.175(b)(1), a supplemental reissue oath/declaration under 37 CFR 1.175(b)(1) must be received before this reissue application can be allowed.

Claims 1-30 are rejected as being based upon a defective declaration under 35 U.S.C. 251.

See 37 CFR 1.175. The nature of the defect is set forth above.

Application/Control Number: 09/975220 Page 3

Art Unit: 1723

Receipt of an appropriate supplemental oath/declaration under 37 CFR 1.175(b)(1) will

overcome this rejection under 35 U.S.C. 251. An example of acceptable language to be used in

the supplemental oath/declaration is as follows:

"Every error in the patent which was corrected in the present reissue application, and is not covered by a prior oath/declaration submitted in this application, arose without any deceptive intention on the part of the

applicant."

4. Applicant's arguments with respect to claims 1-30 have been considered but are moot in

view of the new ground(s) of rejection.

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office

action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is

reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR

1.136(a) will be calculated from the mailing date of the advisory action. In no event, however,

will the statutory period for reply expire later than SIX MONTHS from the date of this final

action.

Application/Control Number: 09/975220

Art Unit: 1723

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Kim whose telephone number is (703) 308-2350. The examiner can normally be reached on weekdays from 7:00 AM - 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda Walker, can be reached on (703) 308-0457. The fax phone number for official response after final action is (703) 872-9311, and the fax phone number for all other official faxes is (703) 872-9310.

When sending a draft amendment by fax, please mark the paper as "DRAFT"; otherwise, mark the paper "OFFICIAL". This will expedite the processing of the paper.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0651.

John Kim
Primary Examiner
Art Unit 1723

J. Kim February 21, 2003

PTO/SB/08A (10-01)

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Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

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Sheet

Complete if Known			
Application Number	09/975,220		
Filing Date	October 11, 2001		
First Named Inventor	MAHENDRAN		
Group Art Unit	1723		
Examiner Name	KIM, Sun U		
Attorney Docket Number	4320-443		

			U.S. PATENT	DOCUMENTS	
Examiner Cite Initials * No.1		Document Number	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevan
	Number - Kind Code <sup>2</sup> (if known)	MM-DD-YYYY		Passages or Relevant Figures Appear	
JL		US-RE37,549	Feb 19, 2002	Mahendran et al.	
1		US-5,209,852	May 11, 1993	Sunsoka et al.	
$\neg \vdash$		US-4,756,875	Jul 12, 1988	Tajima et al.	
		US-4,775,471	Oct 4, 1988	Nagai et al.	
		US-4,075,100	Feb 21, 1978	Furuta et al.	
		US-4,605,500	Aug 12, 1986	Takemura et al.	
	1	US-4,707,268	Nov 17, 1987	Shah et al.	
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	Ì	US-5,192,456	Mar 9, 1993	Ishida et al.	
	1	U\$-5,584,997	Dec 17, 1997	Yagihashi et al.	
		US-5,643,455	Jul 1, 1997	Kopp et al.	· · · · · · · · · · · · · · · · · · ·
		US-5,647,988	Jul 15, 1997	Kawanishi et al.	
	1	US-5,451,317	Sep 19, 1995	Ishida et al.	
	<u> </u>	US-5,366,625	Nov 22, 1994	Pedersen et al.	
	1	US-5,639,373	June 17, 1997	Mahendran et al.	, , , , , , , , , , , , , , , , , , , ,
JK	<del> </del>	US-6,156,200	Dec 5, 2000	Zha et al.	

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		Foreign Patent Document			Pages, Columns,	
Examiner Initials* Cite No.1	Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Lines, Where Relevant Passages or Relevant Figures Appear	۳	
JK		EP 0 598 909 A1	June 1, 1994	Yamamori et al.		
1		JP 62-144712	June 27, 1987	Yuichi et al.		
		English language abstract of JP 62-144712				
		JP 61-192309	Aug 26, 1986	Toshiaki		
		English language abstract of JP 61-192309			·	
		JP 63-143905	June 16, 1988	Kunio et al.		1
		English language translation of JP 63-143905				
	ĺ	JP 06-343837	Dec 20, 1994	Giichi		
	<u>†                                     </u>	English language abstract of JP 06-343837				
<del></del>	<u> </u>	JP 04-247295	Sep 3, 1992	Osamu et al.		
JK	T	English language abstract of JP 04-247295			<b>!</b> ""	

Examiner Signature Date Considered 1/14/03	
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Substitute for form 1449A/PTO					Complete if Known	
INFC	RMATIO	N DIS	CLOSURE	Application Number	09/975,220	
STATEMENT BY APPLICANT				Filing Date	October 11, 2001	
סות		ואוט	LIOAIII	First Named Inventor	MAHENDRAN	
				Group Art Unit	1723	
_	(use as many :	sheets as	necessary)	Examiner Name	KIM, Sun U	
Sheet	2	of	4	Attorney Docket Number	4320-443	

U.S. PATENT DOCUMENTS					
Examiner	Cite	Document Number	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant
Initials *	No.1	Number - Kind Code <sup>2</sup> (if known)	MM-DD-YYYY	Ched Downsia	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
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		FOREIGN PAT	ENT DOCUME	NTS		
		Foreign Patent Document		Name of Patentee or	Pages, Columns, Lines, Where	
Examiner Initials*	Examiner Cite No.1	Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)	Publication Date MM-DD-YYYY	Applicant of Cited Document	Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
JK		WO 98/28066	Jul 2, 1998	Memtec America Corp.		
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JK		English language abstract of JP 62-004408				

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Examiner Signature	This	Date Considered	1/14/03

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Substitute for form 1449A/PTO Complete if Known Application Number 09/975,220 INFORMATION DISCLOSURE Filing Date October 11, 2001 STATEMENT BY APPLICANT First Named Inventor **MAHENDRAN Group Art Unit** 1723 (use as many sheets as necessary) KIM, Sun U **Examiner Name** 4320-443 Sheet 3 Attorney Docket Number of

		FOREIGN PA	TENT DOCUME	NTS		
Examiner Initials*	Cite No.1	Foreign Patent Document  Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T⁵
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	Ī	English language abstract of JP 05-285349				
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		English language abstract of JP 62-250908				•
		SU 1692626	Nov 23, 1991	Gimranov et al.		1
JK	}	English language abstract of SU 1692626				

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Substitute for form 1449A/PTO		Complete if Known
INFORMATION DISCLOSURE	Application Number	09/975,220
INFORMATION DISCLOSURE	Filing Date	October 11, 2001
STATEMENT BY APPLICANT	First Named Inventor	MAHENDRAN
	Group Art Unit	1723
(use as many sheets as necessary)	Examiner Name	KIM, Sun U
Sheet 4 of 4	Attorney Docket Number	4320-443

Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
JK		"Direct Solid-Liquid Separation Using Hollow Fiber Membrane in an Activated Sludge Aeration Tank" by K. YAMAMOTO; M. HIASA; T. MAHMOOD AND T. MATSUO; Wat. Sci. Tech. Vol. 21, Brighton, pp. 43-54 (1989).	
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		"Optimal fiber spacing in externally pressurized hollow fiber module for solid liquid separation", by KIAT, YAMOTO et al., Water Science Technology Vol. 26, pp 1245-1254, (1992)	
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Examiner Signature Jkm	Date Considered	1/14/03
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<sup>&</sup>lt;sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

### Notice of References Cited

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Examiner	Art Unit			
John Kim	1723	Page 1 of 1		

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×	В	4,647,377	3/1987	Miura et al.	210	500.23
×	C	5,248,424	9/1,993	Cote et al.	210	636
×	D	5,403,479	4/1995	Smith et al.	210	636
x	ε	5,480,553	1/1996	Yamamori et al.	210	650
x	F	5,607,593	3/1997	Cote et al.	210	650
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x	N	61-107905	5/1986	Japan	***************************************	210	500.23
x	0	62-201610	9/1987	Japan		210	500.23
×	P	63-143905	6/1988	Japan			
x	a	1,692,626	11/1991	Soviet Union		210	500.23
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*		Include, as applicable: Author, Title, Date, Publisher, Edition or Volume, Pertinent Pages
×	υ	English translated abstract for Japanese Patent No. 63-143,905 issued June, 1988.
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<sup>\*</sup> A copy of this reference is not being furnished with this Office action. See MPEP \$ 707.05(a).

<sup>&</sup>lt;sup>2</sup> Classifications may be U.S. or foreign,

# UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

**PATENT NO: RE39,294** 

Page <u>1</u> of <u>6</u>

APPLICATION NO.: 09/975,220
ISSUE DATE: September 19, 2006
INVENTOR(S): MAHENDRAN et al.

It is certified that error appears in the above-identified patent and that said Letters Patent are hereby corrected as shown below:

In the References Cited, "U.S. PATENT DOCUMENTS" section, spanning pages 1 and 2, the following references be added:

5,607,593       3/1997       Cote et al.         RE37,549       02/2002       Mahendran et         5,209,852       05/1993       Sunsoka et al.         4,756,875       07/1988       Tajima et al.         4,775,471       10/1988       Nagai et al.         4,075,100       02/1978       Furuta et al.         4,605,500       08/1986       Takemura et al.         4,707,268       11/1987       Shah et al.         4,876,006       10/1989       Ohkubo et al.         4,886,601       12/1989       Iwatsuka et al.         4,915,833       04/1990       Iwatsuka et al.         5,151,191       09/1992       Sunaoka et al.         5,192,456       03/1993       Ishida et al.         5,584,997       12/1997       Yagihashi et al.         5,647,988       07/1997       Kopp et al.         5,647,988       07/1997       Kawanishi et al.         5,366,625       11/1994       Pedersen et al.         5,639,373       06/1997       Mahendran et			
5,480,553       1/1996       Yamamori et al.         5,607,593       3/1997       Cote et al.         RE37,549       02/2002       Mahendran et         5,209,852       05/1993       Sunsoka et al.         4,756,875       07/1988       Tajima et al.         4,775,471       10/1988       Nagai et al.         4,075,100       02/1978       Furuta et al.         4,605,500       08/1986       Takemura et al.         4,707,268       11/1987       Shah et al.         4,876,006       10/1989       Ohkubo et al.         4,886,601       12/1989       Iwatsuka et al.         4,915,833       04/1990       Iwatsuka et al.         5,151,191       09/1992       Sunaoka et al.         5,192,456       03/1993       Ishida et al.         5,584,997       12/1997       Yagihashi et al.         5,647,988       07/1997       Kawanishi et al.         5,451,317       09/1995       Ishida et al.         5,636,625       11/1994       Pedersen et al.         5,639,373       06/1997       Mahendran et	Patent No.	Date:	Name
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4,075,100 02/1978 Furuta et al. 4,605,500 08/1986 Takemura et al. 4,707,268 11/1987 Shah et al. 4,876,006 10/1989 Ohkubo et al. 4,886,601 12/1989 Iwatsuka et al. 4,915,833 04/1990 Iwatsuka et al. 5,151,191 09/1992 Sunaoka et al. 5,192,456 03/1993 Ishida et al. 5,584,997 12/1997 Yagihashi et al. 5,643,455 07/1997 Kopp et al. 5,647,988 07/1997 Kawanishi et al. 5,451,317 09/1995 Ishida et al. 5,366,625 11/1994 Pedersen et al. 5,639,373 06/1997 Mahendran et	4,756,875	07/1988	Tajima et al.
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5,366,625       11/1994       Pedersen et a         5,639,373       06/1997       Mahendran et	5,647,988	07/1997	Kawanishi et al.
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### UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

**PATENT NO: RE39,294** 

Page <u>2</u> of <u>6</u>

APPLICATION NO.: 09/975,220
ISSUE DATE: September 19, 2006
INVENTOR(S): MAHENDRAN et al.

It is certified that error appears in the above-identified patent and that said Letters Patent are hereby corrected as shown below:

In the References Cited, "FOREIGN PATENT DOCUMENTS" section, spanning pages 1 and 2, the following references be added:

Country Code	Document No.	Date
JP	61-107905	5/1986
JP	62-201610	9/1987
JP	63-143905	6/1988
SU	1,692,626	11/1991
EP	0 598 909 A1	06/1994
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JP	62-004408	01/1987
JP	04-180821	06/1992
JP	04-197487	07/1992
JP	02-293093	12/1990

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# UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

**PATENT NO: RE39,294** 

Page 3 of 6

APPLICATION NO.: 09/975,220
ISSUE DATE: September 19, 2006
INVENTOR(S): MAHENDRAN et al.

It is certified that error appears in the above-identified patent and that said Letters Patent are hereby corrected as shown below:

In the References Cited, "FOREIGN PATENT DOCUMENTS" section, spanning pages 1 and 2, the following references be added:

JP	07-136470	05/1995
JP	08-215548	08/1996
JP	S63-38884	10/1988
JP	07-024272	01/1995
JP	03-131324	06/1991
JP	07-185268	07/1995
JP	05-285349	11/1993
JP	62-250908	10/1987

In the References Cited, "OTHER PUBLICATIONS" section, spanning pages 1 and 2, the following references be added:

English translated abstract for Japanese Patent No. 63-143,905 issued June, 1998.

English language abstract of JP 61-192309

English language translation of JP 63-143,905

English language abstract of JP 06-343837

English language abstract of JP 04-247295

English language abstract of JP 07-000770

English language abstract of JP 02-164423

English language abstract of JP 62-114609

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# UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

**PATENT NO: RE39,294** 

Page 4 of 6

APPLICATION NO.: 09/975,220
ISSUE DATE: September 19, 2006
INVENTOR(S): MAHENDRAN et al.

It is certified that error appears in the above-identified patent and that said Letters Patent are hereby corrected as shown below:

In the References Cited, "OTHER PUBLICATIONS" section, spanning pages 1 and 2, the following references be added:

English language abstract of JP 62-004408

English language abstract of JP 04-180821

English language abstract of JP 04-197487

English language abstract of JP 02-293093

English language abstract of JP 07-136470

English language abstract of JP 08-215548

English language abstract of JP 61-107905

English language abstract of JP 07-024272

English language abstract of JP 03-131324

English language abstract of JP 62-201610 English language abstract of JP 07-185268

English language abstract of JP 05-285349

English language abstract of JP 62-250908

English language abstract of SU 1692626

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### UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

**PATENT NO: RE39,294** 

Page <u>5</u> of <u>6</u>

APPLICATION NO.: 09/975,220
ISSUE DATE: September 19, 2006
INVENTOR(S): MAHENDRAN et al.

It is certified that error appears in the above-identified patent and that said Letters Patent are hereby corrected as shown below:

In the References Cited, "OTHER PUBLICATIONS" section, spanning pages 1 and 2, the following references be added:

"Direct Solid-Liquid Separation Using Hollow Fiber Membrane in an Activated Sludge Aeration Tank" by K. Yamamoto; M. Hiasa; T. Mahmood and T. Matsuo; Wat. Sci. Tech. Vol. 21, Brighton, pp. 43-54 (1989).

"Organic Stabilization And Nitrogen Removal In Membrane Separation Bioreactor For Domestic Wastewater Treatment" by C. Chiemchaisri, Y.K. Wong, T. Urase and K. Yamamoto, presented at Membrane Technology in Wastewater Management, Cape Town, March 2-5, 1992

"Optimal fiber spacing in externally pressurized hollow fiber module for solid liquid separation", by KIAT, YAMOTO et al., Water Science Technology Vol. 26, pp 1245-1254, (1992)

"Household membrane bioreactor in domestic wastewater treatment", by CHIEMCHAISRI et al. Water Science Technology Vol. 27, No. 1, pp 171-178, (1993)

"Organic wastewater treatment by activated sludge process using integrated type membrane separation", by FUTAMURA et al. Proceedings IDA and WRPC World Conference on Desalination and Water Treatment, November 1993, Vol. 1, pp 223-230

"Integrated membrane-filtration activated-sludge wastewater treatment system", by ONISHI and FUTAMURAProceedings 1994 MIE International Forum and Symposium on Global Environment and Friendly energy Technology, pp 365-368

"Integrated membrane filtration activated sludge wastewater treatment system", International Symposium on Fibre Science and Technology (ISF'94), Yokohama, October, 1994

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### UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

**PATENT NO: RE39,294** 

Page 6 of 6

APPLICATION NO.: 09/975,220
ISSUE DATE: September 19, 2006
INVENTOR(S): MAHENDRAN et al.

It is certified that error appears in the above-identified patent and that said Letters Patent are hereby corrected as shown below:

In claim 23, line 16, delete the first and second instance of "a," and substitute -said-- for each instance.

In claim 23, line 20, delete "permeate-collection" and substitute -permeate collection-.

In claim 23, line 35, delete "between".

In claim 25, column 33, line 64, delete the first and second instance of "a," and substitute -said-- for each instance.

In claim 25, column 34, line 3, delete "permeate-collection" and substitute –permeate collection—. In claim 25, column 34, line 18, delete "between".

In claim 26, line 44, delete the first and second instance of "a," and substitute -said-- for each instance.

In claim 26, line 48, delete "permeate-collection" and substitute --permeate collection-.

In claim 26, line 63, delete "between".

In claim 29, column 35, line 32, delete the first and second instance of "a," and substitute -said-- for each instance.

In claim 29, column 35, line 36, delete "permeate-collection" and substitute --permeate collection--.

In claim 29, column 36, line 7, delete "between".

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